

Chemical Composition and Physical Properties of Gel-Bond Spray/Gunning Composition

Chemical Composition, %	Pumped	Spray/Gun	Spray/Gun
Al ₂ O ₃	67.7	67.7	67.7
SiO ₂	29.7	29.7	29.7
TiO ₂	1.5	1.5	1.5
Fe ₂ O ₃	0.8	0.8	0.8
Setting agent	none	A	B
Bulk density, kg/m ³			
After firing at			
110°C	2482	2242	2290
815°C	2475	2210	2274
1370°C	2470	2162	2309
Apparent porosity, %			
After firing to			
110°C	15.6	21.6	21.1
815°C	16.0	23.2	22.1
1370°C	16.2	23.7	20.1
Cold MOR, kg/cm ²			
After firing to			
110°C	59	17	32
815°C	93	29	39
1370°C	154	46	53
Cold crushing strength, kg/cm ²			
After firing to			
110°C	213	90	175
815°C	296	105	195
1370°C	460	145	250
Permanent linear change, %			
After firing to			
110°C	-0.05	0.15	-0.15
815°C	-0.1	-0.1	-0.1
1370°C	-0.2	-0.05	-0.17

Source: UNITECR '97 Proceedings.